APPLICANT(S): MERON, Gavriel et al.

SERIAL NO.: FILED:

09/807,892 June 6, 2001

Page 2

## AMENDMENTS TO THE CLAIMS:

Please amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

## **Listing of Claims:**

1. (Currently Amended) A method comprising:

inserting a first in vivo device into a gastrointestinal tract, the first in vivo device including at least an imaging device;

receiving image data from the imaging device;

generating a map from at least the image data;

inserting a second in vivo device into the gastrointestinal tract; and

determining the location of the second in-vivo device relative to the map.

recording a first set of images from a gastrointestinal tract using a swallowable imaging device;

identifying an image showing a location of interest;

recording a second set of images from the gastrointestinal tract using a swallowable imaging device; and

performing image analysis by comparing images from the first set with images from the second set to identify in the second set an image of interest corresponding to an image in the fist set, thereby determining the location of the imaging device relative to the location of interest.

2. (Currently amended) The method according to claim 1, wherein the imaging device is to generate data, and wherein the first in-vivo imaging device is a capsule comprising:

means for signal analysis of data generated in a first pass and a second pass; and means for controlling the second in vivo imaging device in a second pass according to said signal analysis; and

means for performing a job in the gastrointestinal tract.

APPLICANT(S):

MERON, Gavriel et al.

SERIAL NO.: FILED:

09/807,892 June 6, 2001

Page 3

3. (Currently Amended) The method according to claim 1, wherein the step of generating a map of the gastrointestinal tract comprises comprising the steps of: inserting the first in vivo imaging device into the gastrointestinal tract in a first pass;

locating said first in vivo the imaging device; and displaying the location on a position monitor.

- (Currently Amended) The method according to claim 3, further comprising a step of displaying the location of the first in vivo imaging device two or three dimensionally.
- 5. (Currently Amended) The method according to claim 4, wherein the location of the first in vivo imaging device is displayed as an overlay to a schematic presentation of the gastrointestinal tract.
- 6. (Currently Amended) The method according to claim 1, wherein the step of inserting a first in vivo device recording a first set of images using a swallowable imaging device comprises inserting the first in vivo device recording the first set of images in a first pass, and wherein the step of inserting a second in vivo device recording a second set of images using a swallowable imaging device comprises the steps of:

inserting the second in vivo device into the recording the second set of images from the gastrointestinal tract in a second pass;

receiving data from said second in-vivo device;

performing signal image analysis of the data generated in the first pass and of the data generated in the second pass by comparing images from the first pass and of images from in the second pass; and

controlling said second in vivo device according to said signal analysis determining the location of the imaging device relative to the location of interest.

APPLICANT(S): MERON, Gavriel et al.

SERIAL NO.: FILED:

09/807,892 June 6, 2001

Page 4

7. (Currently Amended) The method according to claim [[1]] 6, wherein the step of inserting the first in vivo devices comprises inserting the first in vivo device in a first pass, wherein the step of inserting the second in vivo device comprises inserting the second in vivo device in a second pass, and wherein the first pass and the second pass are one or more passes.

8. (Currently Amended) The method according to claim 1, wherein the location of interest is a location of a pathology.

9-53. (Canceled).